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ABSTRACT

In 1980, the New York City Board of Education set reading standards that fourth- and seventh-grade students were required to achieve before being promoted. The Gates Program was established to provide remedial education to those students failing to meet the standards. A total of 15,705 students in the two grades failed to meet the standards in April 1984 and were eligible for Gates classes. Of these, 78.1 percent met the criterion in August 1984 or in January or April 1985. This success rate was comparable to that of the Gates Program in prior years. The Promotional Policy Program, of which the Gates Program is a part, appears to have had a consistently positive effect on academic achievement, though some special education students, students who had been promoted after spending an unsuccessful year in the Gates Program, and students with limited English proficiency made smaller gains than did the Gates population as a whole. Eleven tables present data on the program's achievements. Appendices present an accounting of reading-eligible Gates students included in full-year gains analyses over the program's 4 years, and describe statistical adjustment of pretest scores to account for regression to the mean. (PGD)

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OEA Evaluation Report

STUDENT ACHIEVEMENT IN THE 1984-85 PROMOTIONAL POLICY PROGRAM

EA 019 132

O.E.A. EVALUATION SECTION REPORT
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July, 1986

STUDENT ACHIEVEMENT IN THE 1984-85 PROMOTIONAL POLICY PROGRAM

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A SUMMARY OF THE REPORT

BACKGROUND

The Promotional Policy

Introduced in June, 1980, the promotional policy of the New York City Board of Education was established to set and maintain city-wide curriculum and performance standards, to identify students unable to meet these standards, and to provide remedial instruction for the identified students. The policy defined promotional "gates" in grades four and seven, with a student's promotion being dependent upon meeting the criterion set for that grade on the city-wide reading test. By instituting uniform, objective promotional standards, the program established specific expectations for students and goals for staff.

Equitable and formalized procedures for granting exceptions were established in the second year of the program that reduced the program's reliance on a single test score for determining eligibility. The program also provides multiple opportunities for students to demonstrate criterion attainment through special testing in August and January as well as regular test administration in April.

The Gates Program has been the impetus for an extensive curriculum development effort for students who need an alternative instructional approach to attain standards. The Division of Curriculum and Instruction produced curriculum guides that have been used within the program and have been extended to other programs and administrative units.

The Gates Program was the impetus for an extensive staff development effort for teachers and supervisors. Central staff have conducted sessions in the summer and during the school year. Districts were also able to request that central staff conduct workshops on specific topics in their districts. As a result, a cadre of trained staff has been created to work in the program or to apply skills acquired in the Promotional Policy Program to other assignments.

This report provides information about the fourth- and seventh-grade students who, in April, 1984 did not reach the promotional criterion set for their grade. The subsequent performance of these students during the 1984-85 school year is reported.

A total of 15,705 students who were in fourth or seventh grade for the first time in 1983-84 failed to meet the criterion set on the California Achievement Test (CAT) in reading or (if an eligible limited-English-proficient student) on the Language Assessment Battery (LAB). These students were eligible for placement in Gates classes in 1984-85. An additional 549 students who had been in fourth-grade and 389 students who had been in seventh-grade Gates classes in 1983-84 had April, 1984 test scores below criterion. These students were promoted but were eligible for Extension classes.

Achievement of Gates Students

Of the 15,785 Gates-eligible students, 78.1 percent met the criterion for their grade in August, 1984; January 1985; or April, 1985. In addition, both the average fourth and the average seventh graders had posttest scores that were one-half year above the cut-off (average scores of 4.2 and 7.0 grade equivalents, respectively).

Thus, criterion attainment and achievement gains continue to be consistent with those of prior years. Over the four years of the program, 78.7 percent of the fourth-grade and 70.9 percent of the seventh-grade Gates students attained their reading criterion on the CAT. In addition, the average full-year gain over the four years was 46.7 scale-score units in the fourth grade (bringing these students to a grade-equivalent score of approximately 4.2) and 43.3 scale-score units in the seventh grade (bringing the seventh-graders to a grade-equivalent score of approximately 6.7).

The 1984-85 results compare favorably to those of Gates students in prior years and to those of a comparison group of 1981-82 students who would have been eligible if there had been a program. Full-year gains of Gates students on the D.R.P. provide additional evidence of the progress made by Gates students during the 1984-85 school year.

Patterns of achievement of Gates students by promotional category remain comparable to those of prior years. Students promoted in August or January had higher pretest and posttest scores and made larger gains than full-year holdovers. Of the full-year holdovers, those who did not meet criterion and became Extension students also made minimal gains.

Patterns of achievement by subgroups of the Gates population remain similar to those of previous years. The achievement of resource room students was slightly less than that of the full Gates population in both fourth and seventh grade. As in prior years, LEP students' gains were less than those of the entire group in both grades.

Achievement of Extension Students

Achievement of Extension students continues to be problematic. The gains of eighth-grade Extension students, particularly, do not match those of Gates students overall.

Summary

The evaluations of the Promotional Policy Program over the past four years suggest that the program has had a consistently positive effect on academic achievement, particularly in fourth and seventh grade. This effect appeared to continue in the 1984-85 school year.

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I. PROMOTIONAL POLICY STUDENT ACHIEVEMENT, 1984-85

BACKGROUND

Introduced in June, 1980, the promotional policy of the New York City Board of Education was established to set and maintain city-wide curriculum and performance standards, to identify students unable to meet these standards, and to provide remedial instruction for the identified students. The policy defined promotional "gates" in grades four and seven, with a student's promotion being dependent upon meeting the criterion set for that grade on the city-wide reading test. By instituting uniform, objective promotional standards, the program established specific expectations for students and goals for staff.

Equitable and formalized procedures for granting exceptions were established in the second year of the program that reduced the program's reliance on a single test score for determining eligibility. The program also provides multiple opportunities for students to demonstrate criterion attainment through special testing in August and January as well as regular test administration in April.

The Gates Program has been the impetus for an extensive curriculum development effort for students who need an alternative instructional approach to attain standards. The Division of Curriculum and Instruction produced curriculum guides that have been used within the program and have been extended to other programs and administrative units.

The Gates Program was the impetus for an extensive staff development effort for teachers and supervisors. Central staff have conducted sessions in the summer and during the school year. Districts were also able to request that central staff conduct workshops on specific topics in their

districts. As a result, a cadre of trained staff has been created to work in the program or to apply skills acquired in the Promotional Policy Program to other assignments.

This report provides information about the promotional policy and the fourth- and seventh-grade students who in April 1984 failed to attain the criterion for their grade. The subsequent performance of these students during the 1984-85 school year is also reported.

DESCRIPTION OF THE DATABASE

As in the past, the analysis of test results in the fourth year of the program utilized information supplied by the Office of Student Information Services (OSIS). This database consists of test records of all students who were in fourth or seventh grade in April, 1984.

A total of 15,705 students (see Appendix, Table A-1) were identified who were in either the fourth or seventh grades for the first time and whose April, August, or September, 1984 reading score was below criterion for their grade. Limited English Proficient (LEP) students who had been in an English language school system for at least two but less than four years were identified from data entered on the Language Assessment Battery (LAB) test answer document. These LEP students were subject to the LAB promotional criteria;* all other nonexempt students were required to meet the reading criteria on the California Achievement Test (CAT).

In addition, 549 students who had been in the 1983-84 fourth-grade Gates program and 389 students who had been in the 1983-84 seventh-grade Gates program had April, 1984 test scores that were still below criterion. These students were eligible for the 1984-85 fifth-grade and eighth-grade Extension programs, respectively.

The present report evaluates the progress in 1984-85 of these Gates and Extension students through analyses of the standardized reading and mathematics achievement test scores.

ATTAINMENT OF PROMOTIONAL CRITERIA BY GATES STUDENTS

1984-85 Criterion Attainment

Of the 15,705 Gates-eligible students, 14,718 had both pretest and posttest scores. Of these, 11,479 (78.1 percent) met the promotional criterion for their grade on one of the three dates when the reading tests were administered: August, 1984; January, 1985; or April, 1985. As in previous years, a greater proportion of the fourth than seventh graders (79.5 and 77.0 percent, respectively) met the criterion for their grade. A total of 3,221 students (21.9 percent) in both grades were unable to attain the criterion. These students became double holdovers and thus were eligible for the 1985-86 Extension program.

Comparison of Reading Criteria Attainment

Attainment of reading criteria in 1984-85 can be compared directly with attainment in previous years; Table 1 includes data for all four Gates school years. In the fourth grade, the rate of attainment in 1984-85 (79.5 percent) is comparable to the rates in 1983-84 (79.3 percent), in 1982-83 (79.8 percent), and 1981-82 (77.0 percent). In the seventh grade, 1984-85 criterion attainment was greater then than in 1983-84 and comparable to

*LAB criteria for fourth grade were an English LAB reading subtest raw score of 13 or above in April, 1983; however, in April 1984 the criterion for fourth grade was changed to a total test raw score of 47 or above. For seventh grade, the criterion remained a reading subtest raw score of 24 or above at both testing dates.

TABLE 1
Comparison of Reading Criterion Attainment by
1981-82, 1982-83, 1983-84, and 1984-85 Gates Students[a]

	1981-82		1982-83		1983-84		1984-85	
	N	%	N	%	N	%	N	%
Grade Four								
Students with pretest and posttest scores	8,434		6,808		5,127		6,339	
Students meeting criterion								
August	2,124	25.2	1,920	28.2	1,537	30.0	1,505	23.7
January	488	5.8	376	5.5	300	5.9	330	5.2
April	3,884	46.0	3,140	46.1	2,227	43.4	3,208	50.6
Total meeting criterion	6,496	77.0	5,436	79.8	4,064	79.3	5,043	79.5
Double holdovers	1,938	23.0	1,372	20.2	1,063	20.7	1,296	20.5
Grade Seven								
Students with pretest and posttest scores	10,219		9,402		7,799		8,379	
Students meeting criterion								
August	2,548	24.9	3,357	35.7	2,208	28.3	2,832	33.8
January	1,284	12.6	970	10.3	1,076	13.8	811	9.7
April	2,642	25.9	2,755	29.3	2,100	26.9	2,811	33.5
Total meeting criterion	6,474	63.4	7,082	75.3	5,384	69.0	6,454	77.0
Double holdovers	3,745	36.6	2,320	24.7	2,415	31.0	1,925	23.0

[a] This table includes both reading-only and reading and/or mathematics Gates-eligible students in 1982-83. In 1981-82, 1983-84 and 1984-85 students were held over if they were below the reading criterion.

gains in other program years. This increase is consistent with system-wide trends in reading scores in past years which have been attributed, in part, to the use of alternate forms of the CAT. Overall, 78.8 percent of the fourth-grade Gates students and 70.9 percent of the seventh-grade Gates students attained the reading criteria in the four years of the program.

READING ACHIEVEMENT GAINS OF GATES STUDENTS

Overall Achievement on the CAT

The CAT results on 13,212 Gates-eligible students who had both pretest and posttest scores were analyzed for gains. The results of these analyses appear in Table 2. The scores are expressed in CAT scale-score units since this allows analysis of the scores of students who were tested with different levels of the CAT. Grade-equivalent (G.E.) scores are reported to provide an indication of average group standing in relation to the promotional criteria. Pretest means were adjusted to account for regression to the mean,* a statistical artifact which results from using the same test for both pupil selection and program evaluation, especially in populations which have distributions that differ from the norming group.

The data-analysis results, by grade, indicate that Gates students made progress in reading during the 1984-85 school year. In both the fourth and seventh grades the average student had an end-of-year score that was at least one-half year above the cutoff. The average fourth grader achieved an April, 1985 score of 4.2 G.E. and the average seventh grader achieved a score of 7.0 G.E.

*Only April to April scores of the total tested population can be adjusted for the regression effect. Refer to Appendix B for these computations.

TABLE 2

Reading Achievement on the CAT by Gates-Eligible Students

Grade	N[a]	April, 1984 Observed mean scale score	(S.D.)	Adjusted mean scale score[b]	G.E.	April, 1985 Mean scale score	(S.D.)	G.E.	Difference[c] Scale score
Four	5,741	374.7	(22.2)	390.2	3.5	425.0	(33.8)	4.2	34.8
Seven	7,471	456.6	(26.1)	472.0	5.7	508.3	(40.2)	7.0	36.3

[a] An additional 598 fourth- and 908 seventh-grade students were eligible for Gates on the basis of a below-criterion CAT score. They were missing one or the other April scale score and could not be included in these gains analyses.

[b] An adjustment was made to account for regression to the mean.

[c] The difference score is calculated from the adjusted pretest score.

Comparison of Gains Across Four School Years

During the first three years of the program, gains of Gates students were contrasted with those of a "comparison group." Comparison group students were 1980-81 students who would have been eligible for Gates if the program had existed that year. This analysis was repeated to include the current fourth-year results. The data are found in Table 3.

As in previous years, the fourth grade Gates-eligible students show higher posttest scores than did students in the 1980-81 comparison group. Across the four years the gains of Gates-eligible students are comparable.

A somewhat different pattern is found in the seventh grade. While initially the first-year test results suggested that Gates students scored slightly but significantly lower than the comparison group, scores for subsequent years show gains that are higher than either the comparison group or the first-year group.

Gains of the Degrees of Reading Power (D.R.P.)

Since April, 1982, the D.R.P. has been administered on a city-wide basis to fourth- and seventh-grade students. The main purpose of the D.R.P is to identify the level of reading materials students can handle both independently and during instruction. The D.R.P. has also been used as an additional instrument to measure the ability of students found eligible for the Gates program when determining whether or not exceptions should be granted.

Gates students' full-year gains on the D.R.P. are an additional indication of their performance during the school year. The results in Table 4 further support the results obtained from the CAT analyses. By the end of the 1984-85 school year, based on their D.R.P. results, Gates

TABLE 3

Comparison of Reading Achievement on the CAT by the 1980-81 Comparison Group and 1981-82, 1982-83, 1983-84, and 1984-85 Gates Students

School year	N	Observed mean pretest scale score	G.E.	Observed mean posttest scale score	G.E.
Grade Four					
1980-81	6,914	376.3	3.1	420.6	4.1
1981-82	6,924	373.3	3.1	422.7	4.1
1982-83	6,003	373.1	3.1	424.4	4.2
1983-84	4,226	374.5	3.1	425.6	4.2
1984-85	5,741	374.7	3.1	425.0	4.2
Grade Seven					
1980-81	10,214	452.6	5.0	494.6	6.5
1981-82	8,659	450.6	4.9	491.8	6.4
1982-83	8,439	452.1	5.0	501.3	6.7
1983-84	6,230	456.6	5.0	499.9	6.7
1984-85	7,471	456.6	5.1	508.3	7.0

[a] Mean posttest scores are not adjusted for pretest level, and no covariance analysis for the five years has been performed. In addition, theses are observed scores which have not been adjusted for regression and as as result overestimate actual gains.

students were able to work with higher level reading materials than they could during the previous year. On the average, fourth-grade Gates students could work with materials similar to the following passage, which has a readability index of 43 D.R.P. units:

> A bark canoe proved to be better than a log canoe for several reasons. It hauled heavier loads. It glided more smoothly. A log canoe was hard to repair. But cracked, torn, or worn bark could be mended quickly. A bark canoe weighed less than a log canoe. It was so light a lone man could carry it. A log canoe could be no longer than a tree. But a bark canoe was different. It could be almost any length.

On average, seventh-grade Gates students at the end of the year could learn from passages somewhat more difficult than the following, which has a readability index of 51 D.R.P. units:

> Most creatures take great care to protect their eggs. The walking stick does not. It just drops its eggs, scattering them loosely on the ground. Dozens and dozens drop at a time. As the eggs fall onto dry leaves, they sound like raindrops falling. Many of the eggs do not hatch. But enough do so that the walking sticks will not die out. They have existed on earth since before the era of the dinosaurs.

TABLE 4

Reading Achievement on the D.R.P. by Gates-Eligible Students[a]

Grade	N	April, 1984 Mean instructional score	April, 1984 (S.D.)	April, 1985 Mean instructional score	April, 1985 (S.D.)	Difference Instructional score
Four	2,226	38.0	(6.5)	44.0	(6.7)	6.0
Seven	4,238	48.2	(7.6)	52.6	(8.0)	4.4

[a] Not all of the students included in the full-year CAT gains analysis had both D.R.P. scores. The CAT scores of students who could be included in this D.R.P. analysis were: grade 4 (n = 3,625) April, 1984, M = 376.7; April, 1985, M = 429.1; grade 7 (n = 3,108) April, 1984, M = 455.4; April, 1985, M = 503.4.

Fourth-grade D.R.P. results appear to be from a group whose CAT performance was lower than the full reading-eligible population displayed in Table 2. The seventh-grade D.R.P. analytic group appears more comparable to the seventh-grade group included in the CAT full-year gains analyses.

Reading Achievement by Promotional Category

Table 5 presents the results of analyses on the full-year gains made by students who were eligible for the Gates program for different lengths of time: students promoted in August, 1984; students promoted in January, 1985; and full-year holdovers.

Students promoted in August, 1984. The promotional policy allowed students who scored below criterion on the April, 1984 CAT to take the test again at the end of summer school. Full-year gains of students who took and passed the August test appear in Table 5. These students were eligible for promotion to a 1984-85 fifth- or eighth-grade class. Students in the fourth-grade group averaged 4.6 G.E. on the April, 1985 CAT, more than a year of growth for these students.* This level of performance is at the required level for fourth graders but one year below the score expected of fifth grade students (5.7 G.E.) in April, 1985. A similar pattern was found in the seventh grade: August passers in the 1983-84 seventh-grade group averaged a 7.7 G.E. on the April, 1984 CAT. This is the grade level expected for seventh grade (7.7 G.E.) and it represents almost two years' growth.* Nevertheless, these seventh-grade students had been promoted to eighth grade and, as a result, their average score was now one year below the expected eighth-grade level (8.7 G.E.).

Students Promoted in January, 1985. In January, the criteria were higher for students seeking promotion (4.6 G.E. for fourth grade and 7.2 for seventh grade). These criteria were increased so that students promoted at mid-year would be more likely to perform successfully in the

*Note that this is "raw growth" uncorrected for regression. Only the gains of the full group (reported in Table 2) could be corrected for this effect. Therefore, these results are an overestimate of actual gains.

TABLE 5

Reading Achievement on the CAT by Gates-Eligible Students,
by Promotional Category

Grade	N	April, 1984 Mean scale score	(S.D.)	G.E.	April, 1985 Mean scale score	(S.D.)	G.E.	Difference[a] Scale score
Students promoted in August, 1984								
Four	1,418	382.2	(16.2)	3.3	439.5	(28.7)	4.6	57.3
Seven	2,642	465.0	(17.8)	5.4	524.3	(30.8)	7.7	59.3
Students promoted in January, 1985[b]								
Four	276	383.9	(16.0)	3.3	454.4	(25.1)	5.0	70.5
Seven	670	462.1	(20.2)	5.3	527.5	(30.8)	7.8	65.4
Full-year holdovers[c]								
Four	4,047	371.4	(23.5)	3.0	417.9	(33.3)	4.0	46.5
Seven	4,159	456.5	(29.5)	5.1	495.1	(41.8)	6.5	38.6

[a] These observed mean scale scores, which for subgroups cannot be adjusted for the regression effect, overestimate actual gains. For each of these analyses, $p < .0001$.

[b] Students who met the high January criterion could, but did not have to be promoted mid-year. However, if they passed the January test they were analyzed here as part of the January promotion group, even if they were not actually promoted.

[c] Note that although holdovers also make appreciable gains in reading scores, their initial low performance prevents them from attaining promotional criteria.

higher grade, and thus would be better able to attain the end-of-year, promotional criterion for their new grade. These students were eligible for participation in a Gates class for the first half of the 1984-85 school year, and for placement in a regular fifth- or eighth-grade class for the remainder of the year. In the fourth grade, the average April, 1985 score (5.0 G.E.) was less than one year below on-grade performance as defined for the fifth grade; in the seventh grade the average score (7.8 G.E.) was within one year of on-grade performance for the eighth grade.*

Full-Year Holdovers. Table 5 also presents gains in reading achievement made by full-year holdovers. This group includes those students who had not met the criterion in either August, 1984 or January, 1985. The scale-score gains of these students were not as large as those of students who were in the program for shorter periods. For both the fourth and seventh grades, the full-year holdovers had lower pretest scores, lower posttest scores, and made smaller gains than did students who attained criterion in either August or January.

The full-year holdover group was next divided into two subgroups: those who met the criterion in April, 1985 and those who did not. The results of this analysis are presented in Table 6. Although in both grades the average pretest score of April, 1985 promotees was lower than that of students meeting their criterion at an earlier point (Table 5), the actual gain evidenced is comparable. On the other hand, students who did not meet criterion and became Extension students made minimal gains. If a regression adjustment could be applied to these data it would probably erase the

*Note that this, again, is "raw growth" uncorrected for regression. Only the gains of the full group (reported in Table 2) could be corrected for this effect. Therefore, these results are an overestimate of actual gains.

TABLE 6

Reading Achievement on the CAT by
Full-year Students

Grade	N	April, 1984 Mean scale score	(S.D.)	G.E.	April, 1985 Mean scale score	(S.D.)	G.E.	Difference[a] Scale score
April, 1985 promotees								
Four	2,979	375.2	(20.2)	3.1	433.0	(22.1)	4.7	57.8
Seven	2,621	475.0	(24.8)	5.8	519.6	(26.3)	7.5	44.6
Extension-eligible students								
Four	1,068	360.9	(28.2)	2.7	375.9	(20.8)	3.1	15.0
Seven	1,538	439.4	(33.3)	4.6	453.2	(27.7)	5.0	13.8

[a] These observed mean scale scores, which for subgroups cannot be adjusted for the regression effect, overestimate actual gains. For each of these analyses, $p < .0001$.

small gains of the students not meeting the criterion in April, 1985. As was noted in prior reports, gains of this group are difficult to measure since the pretest scores are near chance level. Random guessing could produce scores in this range.* Therefore, the gains of these students cannot be measured reliably. While the posttest scores are less subject to this problem, for each grade the results indicate that these students continue to perform below the promotional standard.

Summary of Reading Gains by Promotional Category. Students in all promotional categories made gains in reading during the 1984-85 school year. In examining gains according to promotional category, the fact that the Gates population is not homogeneous continues to emerge as it has in prior years. The program was designed to release quickly those students who make rapid progress, while retaining longer those who demonstrate greater need.

Reading Achievement by Subgroups of the Gates Population

Resource Room Students. Table 7 reports gains in reading achievement by Gates-eligible students who also were in a special-education resource room. Their performance on the CAT was almost identical to that of the total Gates-eligible population (of which they are a part). In each grade the average pretest score was practically equal to that of the full group (Table 2). However, the amount of gain made over the one-year span was slightly less.

*The 360.9 pretest scale score of fourth-grade students who became Extension eligibles is equivalent to a raw score of 12 (out of 70); the 439.4 scale score of seventh-grade students who became Extension eligibles is equivalent to a raw score of 20 (out of 70). A simple estimate of chance level, based on four choices for each item, is a raw score of 17 or below in each grade; one standard deviation above this is a score of 21. Therefore, a raw score of 21 or lower is below chance level.

TABLE 7

Reading Achievement on the CAT by Resource Room Students[a]

Grade	N	April, 1984 Mean scale score	(S.D.)	G.E.	April, 1985 Mean scale score	(S.D.)	G.E.	Difference[b] Scale score
Four	444	375.7	(19.9)	3.1	419.9	(31.9)	4.0	44.2
Seven	270	455.0	(24.3)	5.1	504.7	(40.1)	6.8	49.7

[a] An additional 18 fourth- and 32 seventh-grade students were identified as Resource Room participants; they were missing one or the other CAT scale score and could not be included in these gains analyses.

[b] These observed mean scale scores, which for subgroups cannot be adjusted for the regression effect, overestimate actual gains. For each of these analyses, $p < .0001$.

Limited English Proficient (LEP) Students on the CAT. LEP students who had been in an English language school system for four years or more were required to meet the promotional criteria on the CAT. Table 8 displays the results in each grade of the analysis of gains these students made over the course of the year. As in the previous years of the program, LEP students had lower pretest scores than those of the total Gates-eligible population. Also, the gains of the LEP students were not as great.

LEP Student Participation. The number of students (1,208) identified as LEP-entitled, Gates-eligible is nearly twice that of the previous year (699) and almost four times that of 1982-83 (355 students). This increase in the number of LEP/Gates students is attributed to two factors: the establishment of a Bilingual Education Student Information System (BESIS) in Spring of 1983, and the clarification of the criteria for CAT and LAB eligibility.

LEP Students on the Language Assessment Battery (LAB). The operational definition of limited English proficiency (LEP) is a score at or below the twentieth percentile on the English reading subtest of the LAB. LEP students who were in an English language school system for at least two but less than four years were required to meet the promotional criterion on the English reading subtest of the LAB. As in 1983-84, fourth-grade LAB-eligible students were required to meet criterion as measured by a total raw test score of 47 on the April LAB. The criterion for seventh-grade LAB-eligible students remained a reading subtest raw score of 24 or above.

TABLE 8

Reading Achievement on the CAT by Gates-Eligible LEP Students

		April, 1984			April, 1985			Difference[a]
Grade	N	Mean scale score	(S.D.)	G.E.	Mean scale score	(S.D.)	G.E.	Scale score
Four	590	368.2	(23.1)	2.9	411.8	(34.4)	3.9	43.6
Seven	618	445.8	(28.2)	4.8	487.4	(41.2)	6.2	41.6

NOTE: Separate analyses were not performed for full-year holdovers and students promoted in January because the numbers were so small.

[a] These observed mean scale scores, which for subgroups cannot be adjusted for the regression effect, overestimate actual gains. For each of these analyses, $p < .0001$.

Table 9 displays the results for the fourth and seventh grade of the analysis of gains on the LAB. In the fourth-grade, the average LAB-eligible student obtained a score above the LAB promotional criterion (55.9) by the end of the program year. In the seventh-grade, the average score (24.5) was slightly above the promotional criterion at the end of the program year.

THE FIFTH-GRADE AND EIGHTH-GRADE EXTENSION PROGRAMS

Fourth-grade and seventh-grade students who had been eligible for Gates placement in 1983-84 and who failed to attain the reading criterion in April, 1984 were eligible for placement in the 1984-85 fifth- and eighth-grade Extension programs, respectively. Criterion attainment in reading and achievement gains made in reading by these students are discussed below.

Reading Criterion Attainment

Of the 549 fifth-grade Extension-eligible students, 505 had a pretest and posttest score. (See Table 10.) Of those students with complete test records, 349 (69.1 percent) met the reading promotional criterion by April, 1985. A small group of 156 fifth-grade Extension students was unable to obtain a test score of at least 3.7 G.E. on the CAT and, as a result, did not meet the end-of-year promotional standard for a third consecutive year.

For the 1,389 eighth-grade Extension-eligible students, 1,157 had both pretest and posttest scores. (See Table 10). A total of 620 (53.6 percent) met the promotional criterion by April, 1985, while 537 (46.4 percent did not meet the criterion.

Achievement on the CAT. The CAT results for 495 of the fifth-grade Extension students and 1,099 of the eighth-grade Extension students who had

TABLE 9

Reading Achievement on the LAB by Gates-Eligible LEP Students[a]

		April, 1984			April, 1985			Difference[b]
Grade	N	Mean raw score[c]	(S.D.)	Percentile[d]	Mean raw score[c]	(S.D.)	Percentile[d]	Raw score
Four	52	35.7	(9.6)	3	55.9	(11.4)	13	20.7
Seven	30	17.4	(3.5)	5	24.5[e]	(7.4)	9	7.1

NOTE: Separate analyses were not performed for full-year holdovers and students promoted in January because the numbers were so small.

[a] An additional 110 fourth- and 137 seventh-grade students were LAB-eligible; they were missing one or the other LAB score and could not be included in this analysis.

[b] No regression adjustments have been applied to these data because the LEP Gates-eligible students do not comprise an intact group. As a result these observed mean raw scores could not be adjusted for regression and they overestimate actual gains. For each of these analyses, $p < .0001$.

[c] Since this test is still under development, scale scores were not available for analysis. In fourth grade (level II) the range of scores on this subtest is 1 to 86. In seventh grade (level III) the range is from 1 to 55.

[d] These are the English-speaking norm group percentiles.

[e] The criterion for the fourth grade was the total test score. The criterion for the seventh grade was the reading subtest of the LAB.

TABLE 10

Reading Criterion Attainment by Fifth-Grade and Eighth-Grade Extension Students

	Fifth-Grade Extension		Eighth-Grade Extension	
	N	%	N	%
Students with pretest and posttest scores*	505		1,157	
Students meeting criterion -- August, 1984	15	3.0	16	1.4
Students meeting criterion -- January, 1985	2	0.4	3	0.3
Students meeting criterion -- April, 1985	332	65.7	601	51.9
Total meeting criterion	349	69.1	620	53.6
Below reading criterion three times	156	30.9	537	46.4

*Forty-four fifth-grade and 232 eighth-grade students lacked posttest scores. These students were not included in the analysis.

April pretest and posttest scores were analysed for gains. The results for these data appear in Table 11. The average posttest score of 4.1 G.E. for the fifth-grade Extension students is the equivalent of three months above the promotional criterion; however, the 6.3 G.E. for the eighth-grade Extension students is four months below the promotional criterion. Nonetheless, the gains for the eighth-grade Extension students do not match those of Gates students, who began with the same average pretest but obtained a posttest score of 7.0 G.E. (See Table 2).

TABLE 11

Reading Achievement on the CAT by Fifth-Grade and Eighth-Grade Extension Students[a]

		April, 1984			April, 1985			Difference
Grade	N	Observed score	(S.D.)	G.E.	Observed score	(S.D.)	G.E.	Score
Five	495	378.0	(18.7)	3.2	420.3	(35.9)	4.1	42.3
Eight	1,099	452.3	(25.0)	5.0	489.6	(40.2)	6.3	37.3

[a] Observed and difference CAT scores are in scale score units. The observed mean CAT scale scores, which for subgroups cannot be adjusted for the regression effect, overestimate actual gains. For each of these analyses, $p < .0001$.

III. CONCLUSIONS

Achievement of Gates Students

Criterion attainment and student achievement continue to be consistent over the four years of the program. Over the four years, 78.8 percent of the fourth-grade and 70.9 percent of the seventh-grade Gates students attained their reading criterion on the CAT. In addition, the average full-year gain was 46.7 scale score units in the fourth grade (bringing these students to a grade-equivalent score of approximately 4.2) and 43.3 scale score units in the seventh grade (bringing the seventh-graders to a grade-equivalent score of approximately 6.7).

The 1984-85 results compare favorably to those of Gates students in prior years and to those of a comparison group of 1981-82 students who would have been eligible if there had been a program. Full-year gains of Gates students on the D.R.P. provide additional evidence of the progress made by Gates students during the 1984-85 school year.

Patterns of achievement of Gates students by promotional category remain comparable to those of prior years. Students promoted in August or January had higher pretest and posttest scores and made larger gains than full-year holdovers. Of the full-year holdovers, those who did not meet criterion and became Extension students also made minimal gains.

Patterns of achievement by subgroups of the Gates population remain similar to those of previous years. The achievement of resource room students was slightly less than that of the full Gates population in both fourth and seventh grade. As in prior years, LEP students' gains were less than those of the entire group in both grades.

Achievement of Extension Students

Achievement of Extension students continues to be problematic. The gains of eighth-grade Extension students particularly, do not match those of Gates students overall.

Summary

The evaluations of the Promotional Policy Program over the past four years suggest that the program has had a consistently positive effect on academic achievement, particularly in fourth and seventh grade. This effect appeared to continue in the 1984-85 school year.

Appendix A

ACCOUNTING OF READING-ELIGIBLE GATES STUDENTS INCLUDED IN FULL-YEAR GAINS ANALYSES, 1981-82 THROUGH 1984-85

TABLE A-1

Accounting of Reading-Eligible Gates Students Included in Full-Year Gains Analyses, 1981-82 through 1984-85

Student Category	1981-82 Grade 4 N	1981-82 Grade 4 %	1981-82 Grade 7 N	1981-82 Grade 7 %	1982-83 Grade 4 N	1982-83 Grade 4 %	1982-83 Grade 7 N	1982-83 Grade 7 %	1983-84 Grade 4 N	1983-84 Grade 4 %	1983-84 Grade 7 N	1983-84 Grade 7 %	1984-85 Grade 4 N	1984-85 Grade 4 %	1984-85 Grade 7 N	1984-85 Grade 7 %
Students originally held over[a]	10,890		13,847		8,386		12,063		6,235		9,955		7,436		9,989	
Excused from the program																
Appeal (exception)[b]	269		229		768		896		533		630		766		954	
Special education[c]	340		172		---		---		---		---		---		---	
Students actually held over	10,281		13,446		7,618		11,167		5,682		9,325		6,670		9,035	
Eligibles in gains analyses[d]	7,014	68.2%	8,680	64.6%	6,060	79.5%	8,515	76.3%	4,586	80.7%	6,641	71.2%	6,339		8,379	
Not in gains analyses	3,267	31.8	4,766	35.4	1,558	20.5	2,652	23.7	1,096	19.3	2,684	28.8	331		656	

[a] The data for 1981-82 are from Table 1 of the O.E.A. Final Report of that year and include those below criterion in April, August, or September, 1981.

[b] In 1981-82 the exception process (based on appeals) was referred to as an exemption process; these data are from Table 1 of the final report.

[c] The data for 1981-82 are from Table 20 of the final report. In 1981-82 exemptions were not granted on the basis of special education in as systematic a manner as they were in 1982-83 and 1983-84. In addition, the first-year database did not identify exempt students in as systematic a manner as in the later years. As a result, 512 students identified in April, 1982 as special education students were deleted from the analysis because they had to be considered ineligible for the program. In 1982-83 and 1983-84, automatic exemptions were maintained on the database.

[d] In 1981-82, 10,281 fourth-graders were eligible for the program: 10,186 were eligible on the basis of the CAT and the remaining 95 were eligible on the basis of the CREST (refer to Tables 1 and 23 of the O.E.A. final report for the year). In seventh grade, 13,446 were eligible, 13,423 on the basis of the CAT and 233 on the basis of the CREST. In 1982-83, 7,618 fourth graders were eligible for a Gates class, 7,510 of whom were CAT-eligible and 108 were LAB-eligible. In seventh grade, of the 11,167 total, 11,042 were CAT-eligible and the remaining 125 were LAB-eligible. In 1983-84, 5,682 fourth graders were eligible for a Gates class, 5,521 of whom were CAT-eligible and 161 were LAB-eligible. In seventh grade, of the 9,325 total, 9081 were CAT-eligible and the remaining 244 were LAB-eligible. In 1984-85, 162 of the fourth graders were LAB-eligible, the remaining 6,508 were CAT-eligible. Among the seventh graders 179 were LAB-eligible and 8,856 were CAT-eligible.

Appendix B

STATISTICAL ADJUSTMENT OF PRETEST SCORES TO ACCOUNT FOR REGRESSION TO THE MEAN

STATISTICAL ADJUSTMENT OF PRETEST SCORES TO ACCOUNT FOR REGRESSION TO THE MEAN

The equation used to adjust pretest scores to account for the regression effect is taken from A.O.H. Roberts, "Regression Towards the Mean and the Regression Effect Bias," in New Directions for Testing and Measurements, No. 8, 1980, (San Francisco, Jossey Bass), pp. 59-82.

The equation is:

$$\bar{X}cs = \bar{X}s + \frac{o^2}{s^2}(1 - O_{xx})(\bar{X}g - \bar{X}s)$$

This formula was used with the appropriate CAT values to correct April, 1984 pretest means, where:

	CAT, Form C	
	Grade 4	Grade 7
$\bar{X}cs$ = corrected pretest (scale score) mean of Gates-eligible students.....	*	*
$\bar{X}s$ = pretest (scale score) mean of Gates-eligible students.....	**	**
$\bar{X}g$ = city-wide (scale score) mean on pretest.....	446.7	524.5
o = standard deviation of pretest scale scores nationally.....	64.6	75.8
s = standard deviation of pretest scale scores city-wide.....	52.1	59.6
O_{xx} = coefficient of reliability.....	.86	.86

The posttest form of the CAT was C;

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*These values are computed on the following page.

**These values are computed on the following page. These values are only for Gates-eligible students who were included in the full-year gains analyses.

Adjustment of April, 1984 CAT for Students' Gains from April, 1984 to April, 1985

Grade Four ($N = 5{,}741$, $\bar{X}s = 374.7$)

$$\bar{X}cs = 374.7 + \frac{(64.6)^2}{(52.1)^2}(1 - .86)\ (451.7 - 374.7)$$

$$\bar{X}cs = 374.7 + 15.5$$

$$\bar{X}cs = 390.2$$

Grade Seven ($N = 7{,}471$, $\bar{X}s = 456.6$)

$$\bar{X}cs = 456.6 + \frac{(75.8)^2}{(59.6)^2}(1 - .86)\ (534.1 - 456.6)$$

$$\bar{X}cs = 456.6 + 15.4$$

$$\bar{X}cs = 472.0$$